



Conference Bridge

DVBRIDGE

v3.2

User's Manual

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1. Introduction

1.1. Overview

DVBRIDGE is a stand-alone teleconference bridge that is connective with 2-wire analog PBX extensions and/or central office lines. Each of the DVBRIDGE unit provides a virtual meeting room allowing up to eight persons to dial in and converse each other using normal telephones.

1.2. Specifications

Interfaces: 2-wire Analog (POTS)
Dial Signal: DTMF
Capacity: 8 Channels
Main body power input: DC 12V 1.5A
Size: 200mm x 150mm x 15mm
Net Weight: 890g
Working Temperature: 5 ~ 40℃
Humidity: 20-80%

1.3. Name Invention and Definition

1.3.1 Meeting Room

It is the virtual meeting room in where two or more participants can converse one to another thru normal telephones.

1.3.2 System Administrator

Who is the person given with the administrator password and privilege to perform system configuration.

1.3.3 Meeting Organizer

Who is the person given with the privilege to manage meeting room and attendance of participants. At any given time period a meeting room allows only one meeting organizer.

1.3.4 Participant

Who is the person given with a password to enter into meeting room.

1.3.5 Lock Meeting Room

Once meeting room is locked up, the system suspends authentication process so it doesn't allow any more participants to enter into the meeting room. Only meeting organizer has the privilege to lock meeting room.

1.3.6 Unlock Meeting Room

It is the action to unlock meeting room.

1.3.7 Channel Pattern

The word "channel" refers to the telephone port to which an analog PBX extension or central office

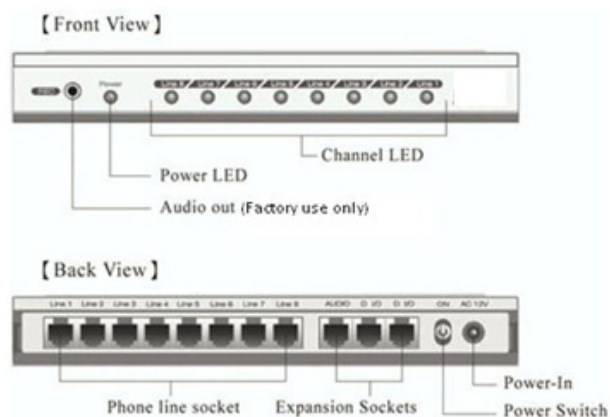
line can be wired. When a channel is configured to “wait-for-ring pattern”, it means this telephone port is not in use (on-hook), so the system can apply this channel for behaving normal telephone function such as answering incoming calls or placing outgoing calls. When a channel is configured to “busy pattern”, it means this telephone port is in use (off-hook), so the system cannot apply this port for behaving telephone normal function such as answering incoming calls or placing outgoing calls.

2. Installation and Telephone line Hookup

2.1 List of Items

DVBRIDGE main body x 1
Power adapter x 1
User's manual x 1

2.2 Main Body View



2.3 Wiring

2.3.1 Plug Power Adapter

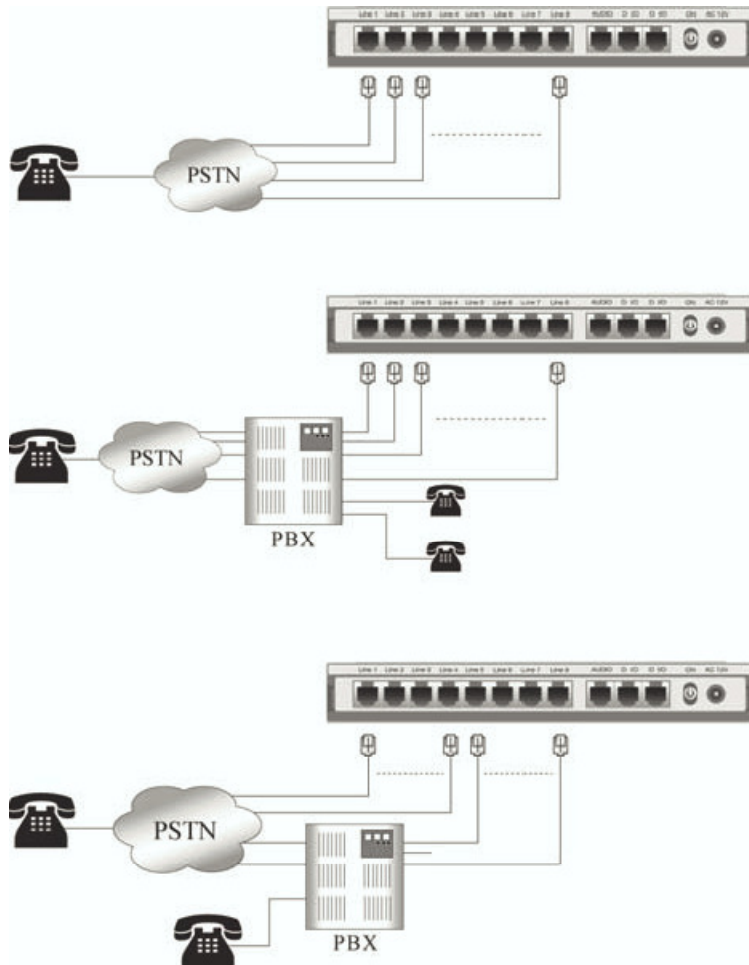
Plug the mains adapter to the commercial power outlet and the cable to the DVBRIDGE main body. The power LED is lit when power switch is set to ON position.

2.3.2 Connect Your Telephone Lines to Line Sockets

Wire telephone 1-8 lines to the phone line sockets 1-8.

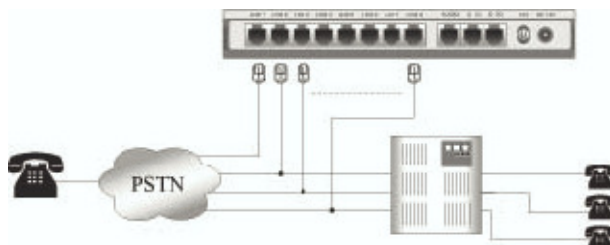
2.3.3 Standard Wiring Plan

All phone lines you wired terminate at the line sockets. No station set (i.e. telephone or fax) is wired with phone line in parallel. The three diagrams in below are typical examples of this wiring plan.



2.3.4 Optional Wiring Plan

Phone lines terminate at the line sockets, but these lines have station sets (i.e. telephone or fax) wired in parallel. The diagram in below is typical example of this wiring plan.



This wiring plan is obviously for saving telephone lines. To allow the station sets (telephone or fax) wired in parallel work normally, DVBRIDGE needs to stay in use (off-hook). Otherwise DVBRIDGE may pick up incoming calls first. When a channel is configured to “busy pattern” it becomes in use, so as to not being able to answer incoming calls. When a channel is configured to “wait-for-ring pattern” it becomes not in use so as to be able to answer incoming calls normally. Refer to “Setting Channel Pattern” section about configuration how-to.

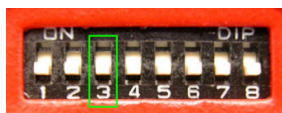
2.3.5 Adjust Pins of DIP Switch

A DIP switch is located on the bottom side of the main body.

Pins 1-4: Set Connection Type and Assign ID

(a) Single unit application (for hosting 8 channels max)

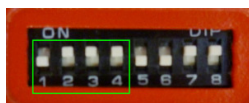
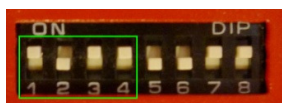
Set pin # 3 to OFF position, which indicates no connection with another DVBRIDGE. You can leave the remaining 3 pins (pins 1, 2, 4) as they were before.



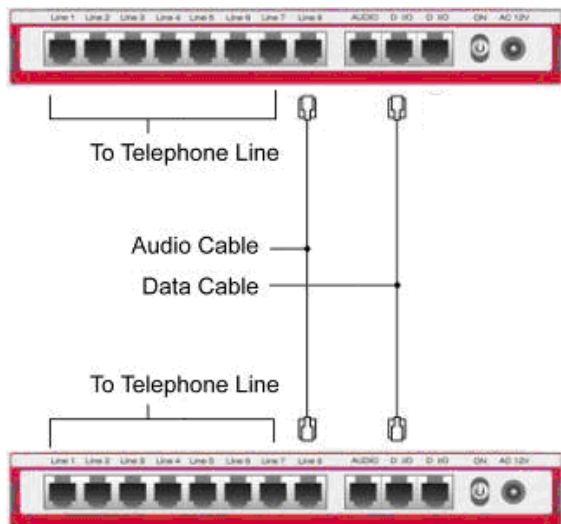
(b) Dual unit application (for hosting 14 channels max)

On both units, set pin # 3 to ON position, which indicates connection with another DVBRIDGE. Once the pin # 3 is ON, LED light of 8th channel is lit.

Then, set pins # 4, 2 and 1 of one unit to ON, OFF and ON position respectively. (Technically it signals 1001 or ID=9.) Continuously set pins # 4, 2 and 1 of another unit to ON, ON and OFF position respectively. (Technically it signals 1010 or ID=10.)



In completion of the pin assignments, wire two DVBRIDGEs physically together. Refer to the diagram in below for wiring connections. Use the factory-supplied cables: audio cable is in white color and data cable is in black color.



Pin 5: Select Dial Tone Duration

ON position indicates duration for 2 seconds and OFF position indicates duration for 4 seconds. OFF position (2 seconds) is recommended.

Pin 6: Enable/Disable AGC

ON position indicates AGC enabled and OFF position indicates AGC disabled. OFF position (disable) is recommended.

Pin 7: Enable/Disable Password Protection

ON position indicates password protection enabled, which makes participants have to type down password before entering into meeting room. OFF position indicates password protection disabled, which relieves participants from using password to enter into meeting room.

Pin 8: Audible Announcement for “#” button

ON position indicates that DVBRIDGE speaks “hash button” when inviting people to press “#” button. OFF position indicates that DVBRIDGE speaks “pound” instead.

3. Participate/Organize Teleconference Meeting

A successful teleconference meeting relies on all participants to “show up” at the virtual meeting room on time. DVBRIDGE allows participants to use normal phones (their desk or mobile phones) to dial a telephone number to “show up” at the virtual meeting room. DVBRIDGE also allows meeting organizer to invite participants to attend meeting by dialing participants’ phone number from the meeting room.

3.1 Participants Attend Meeting

3.1.1 Engage in DVBRIDGE

Dial the telephone number DVBRIDGE is assigned. Once your call is answered, you engage in DVBRIDGE. Following the engagement, you hear a “beep” tone and the verbal message “Please enter password.”

3.1.2 Authenticate identity

Enter [* 4 5 6] or the new pass phrase you get from the authorized person. (“456” is factory default participant’s pass phrase.) You are forwarded to the meeting room immediately after password authentication process is done.

3.1.3 Converse in meeting room

You are supposed to hear the speech from the meeting organizer or another participant right after you entered into the meeting room. If you hear music and the audible message “*please hold*” from time to time instead, it indicates you are the first person entering into the meeting room. If you hear a short “beep” tone somewhere in the meeting, it indicates one participant just exited the meeting room.

3.1.4 Exit meeting room

Just hang up telephone.

3.2 Meeting Organizer Manages Meeting

3.2.1 Engage in DVBRIDGE

Dial the telephone number DVBRIDGE is assigned. Once your call is answered, you engage in DVBRIDGE. Following the engagement, you hear a “beep” tone and the audible message *“Please enter password.”*

3.2.2 Authenticate identity

Enter [* 1 2 3] or enter the new pass phrase you get from the authorized person. (“123 is the factory default organizer’s pass phrase.) You are forwarded to the meeting room once the password authentication process is done. Being as an organizer, you are supposed to be the first person to enter the meeting room. You should hear music and the audible message *“please hold”* from time to time after you got in.

At a given time meeting room can only have one meeting organizer. In no circumstance can meeting room have another organizer show up at the same time. So, any person having successfully entered into meeting room with organizer identity will lead to the result of knocking out the organizer currently in the meeting room. Besides, there will be no alerting message for the organizer currently in the meeting too. Therefore it is important that the pass phrase of meeting organizer is known only to the authorized person.

3.2.3 Call to invite a person to attend meeting

Follow the steps in below to initiate an outgoing call from the meeting room for bringing the party on another end of the phone into the meeting room.

- (A) Press [# 0]. This retrieves a free phone line. If the system feeds back to you with the audible message “All lines are occupied” it indicates no free line. If you want to retrieve a particular line, may press [# 0] + [channel number]. In case you heard no dial tone, you may press [# 0] or [# 0] + [channel number] again to initiate a new attempt.
- (B) Dial the telephone number of the party you want to invite as soon as you heard of dial tone. You are supposed to get a ringing tone after having dialed the phone number. You will have to abort the attempt if you encountered busy or ring-no-answer connection.
- (C) Press [# 9] after your call was answered. This brings the party on the other end of the line into the meeting room.
- (D) Repeat above steps if you wish to invite another party.
- (E) Press [*] + [pass phrase] whenever you intend to return to meeting room.

If you didn’t follow to dial a telephone number or got busy / ring-no-answer connection for over 3 minutes, DVBRIDGE will disconnect phone line and alert you with the audible message *“You will be disconnected soon. To maintain on-hold status, press the pound button.”* If you don’t follow to press the “#” button within 5 seconds, DVBRIDGE will knock you out of meeting room.

3.2.4 Manage meeting

When all participants are in the meeting room, you are recommended to press [# 7] to lock the meeting room. Once [# 7] is pressed, the message *“Meeting room has shut off.”* is announced. Locking up meeting room helps prevent any party from entering into the meeting room. To unlock meeting room, press [# 8]. Accordingly the relevant message *“The meeting room has reopened.”* is announced. During the time meeting room is locked, any party attempting to enter into the room will receive the alerting message *“The meeting is in progress.”*

3.2.5 Converse in meeting room

Refer to the section for participants.

3.2.6 Shutdown meeting room

Press [# # #]. This disconnected all phone lines and exit.

4. Configure DVBRIDGE

4.1 Engage and Authenticate

Dial the telephone number DVBRIDGE is assigned. Once your call is answered, you engage in DVBRIDGE. Following the engagement, press [* 8 8 5], the factory default administrator's password or the new password you reprogrammed.

After authentication process is done, you will hear the message: *"To set channel pattern, press 1; to set password, press 2; to set voice prompt language, press 3; to set number of rings-to-answer, press 4..."*

4.2 Set Channel Pattern

You can ignore this section if you use the [Standard Wiring Plan](#). The factory default setting fits in this plan. Read on if you use the [Optional Wiring Plan](#), which lets station sets (telephone or fax) and DVBRIDGE share same phone lines. Therefore it is necessary to set DVBRIDGE channels being in use when you want station sets work normally and set DVBRIDGE be ready to answer your calls when you want DVBRIDGE to host teleconference meeting.

4.2.1 Set Pattern A or B

Channel pattern should be set on template A if [Standard Wiring Plan](#) is used. Channel pattern should be set on template B if [Optional Wiring Plan](#) is used.

To change channel pattern, press [1] after you heard the message *"To set channel pattern, press 1"* Your selection must correspond to your wiring plan. Template A (wait-for-ring) represents channels are not in use or in idle state that can be ready to answer/initiate a call. Template B (busy) represents channels are in use or in a dormant condition that is incapable to answer/initiate a call.

To configure template, press [2] following the system message *"Channel pattern is set on template A. To change, press 1. To configure template, press 2. To exit press #."* Template is constructed by those of the channels to which live telephone lines were wired. The factory default value is 1, 2, 3, 4, 5, 6, 7, and 8 (8 channels).

In theory, DVBRIDGE must have at least one channel in "wait-for-ring" state. Otherwise, configuration is totally inaccessible. Thus the first channel shouldn't be on template B in any circumstance.

4.3 Set New Passwords

To change password, press [2] after having heard of the system message *"To set password press 2. ..."* You can change the password for participant, meeting organizer and system administrator by pressing the telephone keypad buttons guided by DVBRIDGE.

4.4 Set Voice Prompt Language

To change voice prompt language, press [3] after having heard the system message, *"To set voice*

prompt language press 3... Choose your desired language thru pressing the telephone keypad buttons guided by the system.

4.5 Set Number of Rings to Answer

To change number of rings to answer a call, press [4] after having heard the system message, *"To set number of rings-to-answer, press 4. ..."* Number "1" is recommended if template A is your selection.

4.6 Identify System Software Version

Press [# * 1 6 8] at the moment you heard *"Please enter your password"*. The system will announce a 4-digit number after your entry. If the system speaks "0300", for example, it indicates version 3.0.0 (v3.0.0).

4.7 Exit Configuration

To exit, press [#].

5. Appendix

Functionality and Keystroke Quick Reference Table

5.1 Attend Meeting

Functionality	Keystroke	Reference page
Engage DVBRIDGE	[Phone number of DVBRIDGE]	5
Enter into meeting room	[* 456] or [* + pass phrase]	5
Exit meeting room	Hand up your phone	5

5.2 Organize Meeting

Functionality	Keystroke	Reference page
Engage DVBRIDGE	[Phone number of DVBRIDGE]	6
Enter into meeting room	[* 123] or [*] + [password]	6
Invite a person to attend meeting	[# 0] (or [# 0] + [channel number]) + [Phone number of the off-premise party] + [# 9]	6
Retrieve a new phone line when having encountered ring-no-answer or busy connection	[# 0]	6
End invitation for a person	[# 123] or [#] + [password]	6
Return to meeting room from inviting a person	[# 123] or [#] + [password]	6
Lock up meeting room	[# 7]	6
Unlock meeting room	[# 8]	6
Shutdown meeting room	[# # #]	7

5.3 Configure DVBRIDGE

Functionality	Keystroke	Reference pag
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Engage DVBRIDGE	[Phone number of DVBRIDGE]	7
Enter configuration menu	[* 885] or [*] + [password]	7
Set channel pattern on template A	[1] + [1] if channel pattern is now set on template B. [1] + [#] if channel pattern is set on template A.	7
Set channel pattern on template B	[1] + [1] if channel pattern is now set on template A. [1] + [#] if channel pattern is set on template B.	7
Configure template A	[1] + [2] + [1] + [channel numbers for wait-for-ring] + [#] if channel pattern is set on template A. [1] + [1] + [2] + [1] + [channel numbers for wait-for-ring] + [#] if channel pattern is set on template B.	7
Configure template B	Refer to above.	7
Reprogram participant password	[2] + [1] + [1] + [new password] + [#]	7
Reprogram meeting organizer password	[2] + [2] + [1] + [password] + [#]	7
Reprogram system administrator password	[2] + [3] + [1] + [password] + [#]	7
Set voice prompt language on English	[3] + [1]	7
Set voice prompt language on Chinese	[3] + [2]	7
Set voice prompt language on Japanese	[3] + [3]	7
Set number of rings-to-answer	[4] + [1] + [1, 2, 3, ... or 9] + [#]	8
Exit configuration	[#]	8